

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A power supply system for supplying power to a CPU, said power supply system comprising:

a power supply circuit for supplying the CPU with a prescribed supply voltage;

a voltage detecting circuit for outputting a reset signal for resetting the CPU when the supply voltage is at or below a prescribed voltage detection value;

a control circuit for decreasing the supply voltage to a prescribed power save voltage level when a power saving mode is set,

wherein said control circuit decreases the supply voltage to be the prescribed power save voltage level after decreasing the prescribed voltage detection value to be less than or equal to the power save voltage level when the power saving mode is set such that the reset signal is not output when the power saving mode is being set, and

wherein said control circuit recovers the prescribed voltage detection value after recovering the supply voltage when the power saving mode is terminated.

2. (Currently amended) The power supply system according to claim 1, wherein said power supply supplying circuit switches the power supply voltage from a first power level to a second power level using a first switching signal, said second power level being lower than said first power level,

said control circuit changing the first switching signal from a first to a second condition, and said voltage detecting circuit seetion changing a the reset level from a first reset level to a second reset level by using a second switching signal, said second reset level being lower than said first reset level; and

said control circuit changing the second switching signal from a third condition to a fourth condition,

wherein said control circuit changes the second switching signal from the third condition to the fourth condition before changing the first switching signal from the first to the second condition when the power saving mode is set,

wherein said control circuit returns the second switching signal to the third condition after returning the first switching signal to the first condition when the power saving mode is terminated.

3. (Currently amended) The power supply system according to claim 2, wherein said power supply circuit includes:

a transistor configured to pass an output voltage of a battery power source in accordance with a control voltage applying thereto;

an amplifier configured to output the control voltage, said control voltage being determined from a difference between a prescribed rate portion of the output voltage and a prescribed reference voltage, said prescribed rate portion being input to the amplifier;

a voltage decreasing device for changing the prescribed rate portion and for decreasing the output voltage in response to an input of the first switching signal in the second condition;

wherein said voltage detecting circuit section includes:

a comparator configured to output [[a]] the reset signal for resetting the CPU when a second prescribed rate portion of the output voltage of the power supply supplying circuit seetion is less than or equal to a prescribed reference value; and

a voltage detection value changing device for changing the second prescribed rate portion in response to an input of the second switching signal in the fourth condition transmitted from the control circuit;

wherein said control circuit section outputs the second switching signal in the fourth condition to the power supplying circuit after outputting the first switching signal in the second condition to the voltage detecting circuit when the CPU sets the power saving mode; and said control circuit outputs the first switching signal in the first condition to the voltage detecting circuit after outputting the second switching signal in the third condition to the power supply circuit when the CPU resets the power saving mode.

4. (Currently amended) A method for supplying power to a CPU providing a power saving mode, said method comprising the steps of:

providing a reset signal for resetting the CPU when an output voltage from a power supply is less than or equal to a prescribed voltage detection value;

setting [[a]] the power saving mode;

decreasing the output voltage to be a power saving level after decreasing the prescribed voltage detection value to be less than or equal to the power saving level when the power saving mode is set such that the reset signal is not output when the power saving mode is being set;

resetting the power saving mode; and

recovering the prescribed voltage detection value after recovering the output voltage.